



July 25, 2008

Dennis Gimmestad
Minnesota Historical society
345 W. Kellogg Blvd.
St. Paul, MN 55102-1906

Minnesota Steel Industries LLC Railline
Transmittal of Reconnaissance Survey Results
44941

Dear Mr. Gimmestad:

Enclosed is a reconnaissance survey report conducted by Burns & McDonnell in October of 2007. The survey was conducted as part of a new rail line proposed by the Itasca County Regional Rail Authority (ICRRA) to serve new facilities proposed by Minnesota Steel Industries LLC. The survey is part of the STB's compliance with the Programmatic Agreement dated August 9, 2007. Since the survey, the proposed routing of the rail line has changed slightly to include a small portion of the Hill Annex Mine State Park. That change is documented in correspondence between the St. Paul District Corp of Engineers (COE), the STB and the Minnesota Historical Society. Because the change occurred after our reconnaissance survey and because of the existing documentation that change is not discussed in this report. However, the area of the change was very close to our survey line and we looked at this area during our reconnaissance and found no cultural resources.

No significant cultural resources were found during the reconnaissance survey and it is recommended that the project be allowed to proceed with a finding of no effect. If you have questions or require additional information please contact Dan Shinn at 816-803-8759 or e-mail at dshinn@burnsmcd.com.

Sincerely,

Steve Thornhill
Project Manager

Cc: File
St. Paul District Corps of Engineers
Surface Transportation Board
Itasca County Regional Rail Authority

Reconnaissance Survey for the Itasca County Regional Rail Authority for the proposed Minnesota Steel Industries LLC., Rail Line

On October 9 and 10, 2007 a reconnaissance survey for cultural resources was conducted by Burns & McDonnell Engineering Company. Orval E. "Dan" Shinn served as the principal investigator, John Dunham provided navigation along with assisting in the survey, and Susan M. Houghton conducted the background investigation. The survey covered the selected alignment of the proposed rail line and is depicted in Figure 1. The only areas not surveyed were obvious mined areas and areas that were underwater.

Background Investigation

Prior to the field reconnaissance, Susan M. Houghton conducted background research at the Minnesota State Historic Preservation Office (SHPO), Minnesota Historical Society, St. Paul, Minnesota on August 7, 2007. The study area included portion of four USGS 7.5' topographic quadrangles. The quadrangles were Calumet, Bovey, Nashwauk, and Pengilly. No prehistoric sites are recorded within the boundaries of the project construction disturbance area. Two historic properties within the study area are listed on the National Register of Historic Places (NRHP) and one property is classified by the SHPO as eligible for listing or Considered Eligible Finding (CEF). Forty-eight properties are listed in the attached table provided by Tom Cinadr, the Minnesota SHPO Survey and Information Management Coordinator. In addition to the three properties above there are forty-five properties that while recorded have not been officially evaluated and therefore have an official status as unevaluated. None of the properties are within the proposed project area.

The two NRHP properties are the Hill Annex Mine State Park and the Oliver Iron Mining Company Buildings Boarding House on Jessie Street in Marble, Minnesota. The CEF property, is the Marble Village Hall on the southeast corner of Bawden Street and Alice Avenue in Marble, Minnesota.

Two reports have been completed that include portion of the study area. These reports are on file at the Minnesota SHPO. The NRHP Inventory-Nomination Form titled

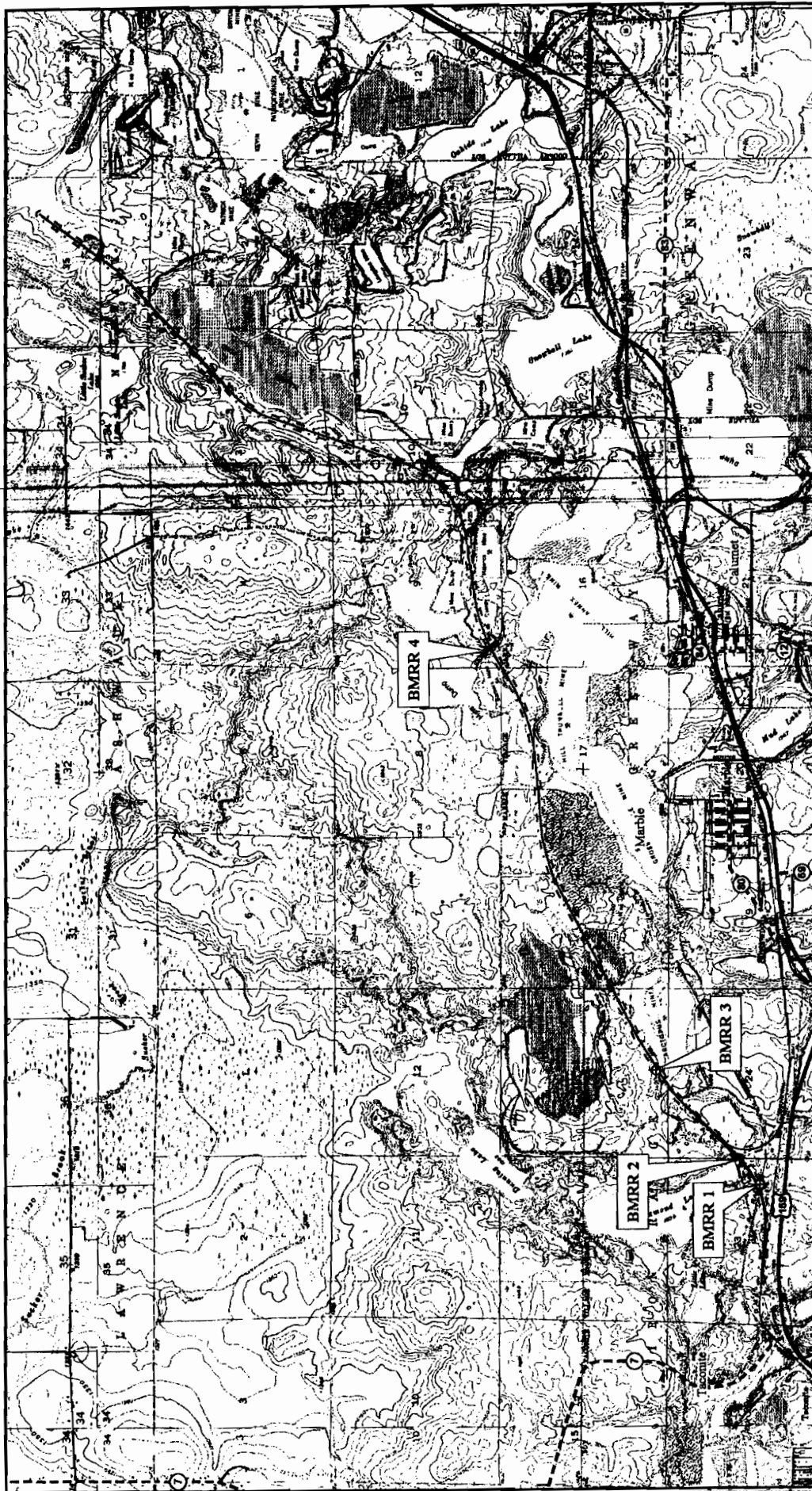


Figure 1
Reconnaissance Survey
Overview



- Legend**
- ⊕ Point
 - Crossing
 - RR Alignment
 - - - 100ft Buffer

Historic Resources of Itasca County (Partial Inventory), prepared by Mark E. Haidet in 1981 and the *Cultural Resources Survey, Evaluation, and Effects Analysis Along Trunk highway 169, Itasca County*, prepared by URS Corporation for the Minnesota Department of Transportation in 2003. Both reports list a portion of the forth-eight structures and bridges on the attached table (Table 1). The table information was provided by the Minnesota SHPO.

The proposed rail line is generally north of the previously surveyed areas and the proposed routes have been planned to avoid the State Park and communities in the area, ~~including Marble, Calumet, Taconite, and Holman. No inventory is known to include~~ structures in the area north of Highway 169 or outside the Hill Annex Mine State Park.

Survey Methods

The proposed right-of-way corridor for the rail line is approximately 200 feet wide. Because the area has been heavily used for mining, it was not expected that a full Phase I archaeological survey was warranted. Therefore, this survey was conducted as a reconnaissance survey to determine if there were cultural resources present and to determine the extent of the disturbance caused by mining activities.

The survey was conducted on foot starting where the proposed rail line corridor departs the existing rail line. Because of the dense cover and the sparse markings showing the extent of the right-of-way, a Trimble sub-meter accurate Global Positioning System (GPS) was used to ensure that the proposed 200 foot wide right-of-way was inspected. The GPS was also used to plot any finds during the survey. The survey proceeded from the west end to the northeast ending at the rail line terminus (Figure 1). The survey was conducted by observing the terrain to determine if it had been previously disturbed by open pit mining or if the terrain was intact. No entirely intact areas were observed. There did appear to be two small pockets of relatively undisturbed area at the southwest end of the line and near the northwest end of the line. However, even these areas have been heavily disturbed by timber harvesting. Geomorphologically, the entire area appears to consist of glacial gravels which normally means there is little or no chance of

Table 1-Structures and Bridges

History/Architecture

PROPERTY NAME	ADDRESS	Twp	Range	Sec	Quarters	USGS	Report	NRHP	CEF	DOE	Inventory Number
COUNTY	Itasca										
CITY/TOWNSHIP:	Calumet										
Calumet State Bank	SW corner 3rd Ave. & Gary St.	56	23	21	SW-NW-NW	Calumet	IC-81-1H				IC-CAC-001
Calumet Village Hall	NE corner Gary St. & 3rd Ave.	56	23	21	SW-NW-NW	Calumet	IC-81-1H				IC-CAC-002
Calumet Variety Store (moved)	xxx Gary St.	56	23	21	SW-NW-NW	Calumet	IC-81-1H				IC-CAC-003
Calumet-Marble Train Depot	xxx 4th Ave.	56	23	21	SE-NW-NW	Calumet	IC-81-1H				IC-CAC-004
Calumet Watertower	xxx Morgan St.	56	23	21	SE-NW-NW	Calumet	IC-81-1H				IC-CAC-005
Calumet Community Church	xxx 6th Ave.	56	23	21	NE-SW-NW	Calumet	IC-81-1H				IC-CAC-006
Bridge No. L1008	CSAH 84 under BN Inc	56	23	21	SW-NW-NW	Calumet					IC-CAC-007
CITY/TOWNSHIP:	Green Way										
Bridge No. 5332	TH 169 crossing under BN RR	56	23	15							IC-GRW-004
CITY/TOWNSHIP:	Greenway Twp.										
Railroad Bridge	off U.S. Hwy. 169	56	23	21	N-NW-NE	Calumet	IC-81-1H				IC-GRN-001
Hill Annex Mine		56	23	16		Calumet	IC-81-1H	Y			IC-GRN-002
Bridge No. 5342	carries abandoned RR tracks of USTH 169 1 M E. of Calumet and Marble	56	23	15		Calumet					IC-GRW-003
CITY/TOWNSHIP:	Holman										
house	211 Guyer St. S	56	24	27	SW-NW-NE	Calumet	IC-2003-1H				IC-HOL-001
house	209 Guyer St. S	56	24	27	SW-NW-NE	Calumet	IC-2003-1H				IC-HOL-002
house	xxx Lawson Ave.	56	24	27	NW-NW-NE	Calumet	ic-2003-1h				IC-HOL-003
house	304-306 Lawson Ave.	56	24	27	NW-NW-NE	Calumet	IC-2003-1H				IC-HOL-004

PROPERTY NAME	ADDRESS	Twp	Range	Sec Quarters	USGS	Report	NRHP	CEF	DOE	Inventory Number
COUNTY Itasca										
CITY/TOWNSHIP: Holman										
house	307 Lawson Ave.	56	24	27 NE-NW-NE	Calumet	IC-2003-1H				IC-HOL-005
house	311 Lawson Ave.	56	24	27 NE-NW-NE	Calumet	IC-2003-1H				IC-HOL-006
house	210 Guyer St. S	56	24	27 SE-NW-NE	Calumet	IC-2003-1H				IC-HOL-007
house	212 Guyer St. S	56	24	27 SW-NW-NE	Calumet	IC-2003-1H				IC-HOL-008
CITY/TOWNSHIP: Iron Range Township										
DM&N Canisteo Mine High Grade Ore Line		56	24	27	Calumet	IC-2003-1H				IC-IRT-004
Holman Mine Line to the Trout Lake Washing Plant		56	24	22	Calumet	IC-2003-1H				IC-IRT-008
Holman Mine Line to the Trout Lake Washing Plant		56	24	27	Calumet	IC-2003-1H				IC-IRT-008
Great Northern Railway Nashauk-Gunn Line		56	24	22	Calumet	IC-2003-1H				IC-IRT-009
Great Northern Railway Nashauk-Gunn Line		56	24	27	Calumet	IC-2003-1H				IC-IRT-009
Duluth, Missabe & Northern Railway Alborn Branch Line		56	24	22	Calumet	IC-2003-1H				IC-IRT-010
Duluth, Missabe & Northern Railway Alborn Branch Line		56	24	23	Calumet	IC-2003-1H				IC-IRT-010
Duluth, Missabe & Northern Railway Alborn Branch Line		56	24	27	Calumet	IC-2003-1H				IC-IRT-010
Mesaba-Cliffs Tailings Basin		56	24	27	Calumet	IC-2003-1H				IC-IRT-011
Holman Mine Stripping and Lean Ore Dump		56	24	22	Calumet	IC-2003-1H				IC-IRT-012
Holman Mine Stripping and Lean Ore Dump		56	24	27	Bovey	IC-2003-1H				IC-IRT-012
Brown No. 2 Mine Stripping Dump		56	24	22	Calumet	IC-2003-1H				IC-IRT-013
Brown No. 2 Mine Stripping Dump		56	24	22	Bovey	IC-2003-1H				IC-IRT-013
Rhude Media Palnt	xxxx TH 169	56	24	23 NE-NW-SW	Bovey	IC-2003-1H				IC-IRT-016

PROPERTY NAME	ADDRESS	Twp	Range	Sec	Quarters	USGS	Report	NRHP	CEF	DOE	Inventory Number
COUNTY CITY/TOWNSHIP: Iron Range Township											
house	6670 US 169	56	24	23	SW-NE-SW	Bovey	IC-2003-1H				IC-IRT-017
CITY/TOWNSHIP: Iron Range Twp.											
house	6708 US 169	56	24	23	SW-NE-SW	Bovey	IC-2003-1H				IC-IRT-018
Taconite and Holman Mine Spur		56	24	22		Bovey	IC-2003-1H				IC-IRT-021
Taconite and Holman Mine Spur		56	24	27		Bovey	IC-2003-1H				IC-IRT-021
CITY/TOWNSHIP: Marble											
United Methodist Church	SW corner Ethel St. & Alice Ave.	56	23	20	SE-SW-NW	Calumet	IC-81-1H				IC-MBC-001
Marble Hospital	xxx Ethel St.	56	23	20	NE-SW-NW	Calumet	IC-81-1H				IC-MBC-002
Oliver Iron Mining Company Buildings Boarding House	xxx Jessie St.	56	23	19	NE-SE-NE	Calumet	IC-81-1H	Y			IC-MBC-003
Henry Bolthouse House	xxx Bawden St.	56	23	19	SE-SE-NE	Calumet	IC-81-1H				IC-MBC-004
Worker's House	xxx Jessie St.	56	23	19	NE-SE-NE	Calumet	IC-81-1H				IC-MBC-005
Marble Village Hall	SE corner Bawden St. & Alice Ave.	56	23	20	SW-SW-NW	Calumet	IC-81-1H	Y			IC-MBC-006
Marble Water Tower	off Harriet St.	56	23	20	NW-SE-NE	Calumet	IC-81-1H				IC-MBC-007
commercial building	xxx Alice Ave.	56	23	20	NE-SW-NW	Calumet	IC-81-1H				IC-MBC-008
First National Bank of Marble	NE corner Alice Ave. & Kate St.	56	23	20	NW-SW-NW	Calumet	IC-81-1H				IC-MBC-009
Burlington Northern Wooden Trestle Bridge No. 16.6	off U.S. Hwy. 169	56	23	20	SE-SE-NW	Calumet	IC-81-1H				IC-MBC-010
Marble Hospital	xxx Ethel St.	56	23	20	NE-SW-NW	Calumet					IC-MBC-011
Bridge No. 90748	CSAH 80 under BN Inc	56	23	19	SW-NE-SW	Calumet					IC-MBC-012
CITY/TOWNSHIP: Taconite											
Oliver Mining Company Housing	xxx Broadway	56	24	22	SW-SW-SW	Bovey	IC-81-1H				IC-TCC-001

PROPERTY NAME	ADDRESS	Twp	Range	Sec	Quarters	USGS	Report	NRHP	CEF	DOE	Inventory Number
COUNTY Itasca											
CITY/TOWNSHIP: Taconite											
Bank Building	xxx Broadway	56	24	22	SW-SW-SW	Bovey	IC-81-1H				IC-TCC-002
Taconite Watertower	xxx Kreitter Ave.	56	24	22	SW-SW-SW	Bovey	IC-81-1H				IC-TCC-003
Taconite Village Hall	NE corner Broadway Ave. & Leroy Ave.	56	24	27	NW-NW-N	Bovey	IC-81-1H				IC-TCC-004
Bridge No. L3811	CSAH 7 under BN Inc	56	24	22	SE-NE-SE	Calumet					IC-TCC-005
Taconite Junction	xxx Kreitter Ave.	56	24	27	NW-NW-SW	Calumet	IC-2003-1H				IC-TCC-006
CITY/TOWNSHIP: Taconite City											
Bridge No. 3363	MUN 3 over Holman Lake Creek	56	24	23							IC-TCC-007

buried cultural resources. With this knowledge in hand it is further surmised that any activity that disturbed the surface would destroy the context of any cultural activity. None of the corridor appears to contain developed soils that would be suitable for the discovery of buried archaeological sites.

The conditions during the survey were mostly cloudy, scattered rain showers, some small snow flakes and very windy. It was cloudy during the entire survey. Because of the wet conditions standing water was present and many of the low lying areas had to be skirted. Using the GPS for navigation proved invaluable for being able to return to the proposed ~~right-of-way after skirting wetlands and mine pits that were filled with water.~~

Results

Other than modern debris consisting of aluminum cans, plastic, modern bottle sherds, and modern deer hunting stands only four cultural resources were observed. The four cultural resources consisted of three abandoned rail lines and four concrete pillars (Figures 2 and 3). The corridor crosses the abandoned rail lines at approximately a ninety degree angle (Photo 1,2, and 3). The only remnants are the rail berm and some of the ties. All of the steel to include the rails, spikes, and rail plates, had been salvaged and were likely reused. One of the rail lines did not appear to be of standard width, but the lack of intact ties (all were rotten) made it difficult to determine the exact width of the rails. What is known is that the ties on this one rail line (BM-01) appeared to be only 5 feet long which would indicate that this rail line may have been narrow gage. In many instances across the country narrow gage rail lines were the rail line of choice for temporary use such as those used by the mining industry. The other two abandoned rail lines appeared to be standard gage. Further research on-line at <http://www.missabe.com/oliver.html> confirmed that narrow gage rail lines were used in the very early years of strip mining on the Mesabe Range but the economics of shipping ore quickly forced the mines to convert to standard rail.

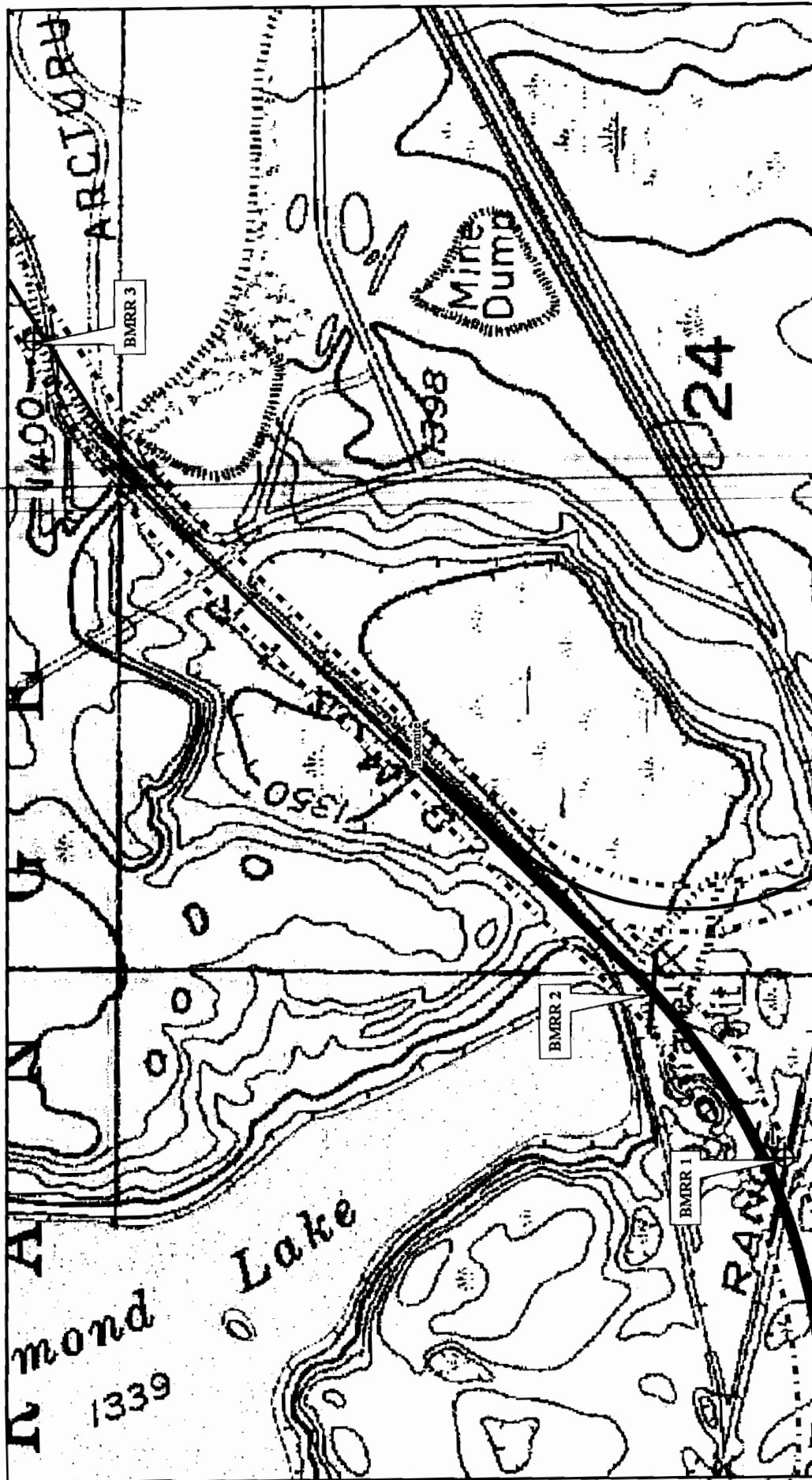
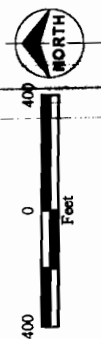
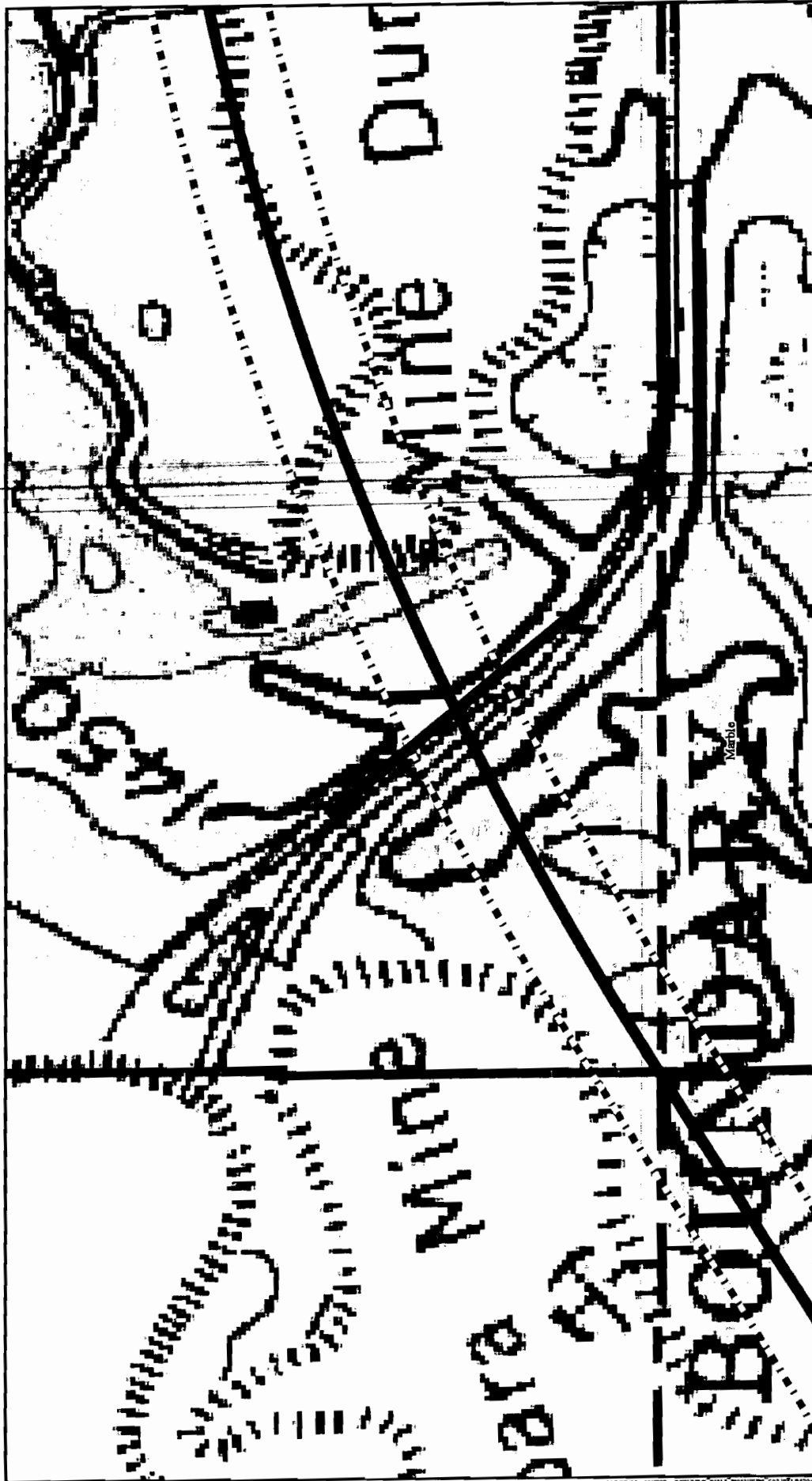


Figure 2
BMRR 1, BMRR 2, and BMRR 3

LEGEND

- ⊕ Point
- Crossing
- - - RR Alignment
- ⋯ 100ft Buffer





- Legend**
- Crossing
 - RR Alignment
 - - - 100ft Buffer

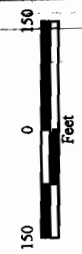


Figure 3
BMRR 4



Photo 1—Rail berm looking west



Photo 2—Rail berm looking east

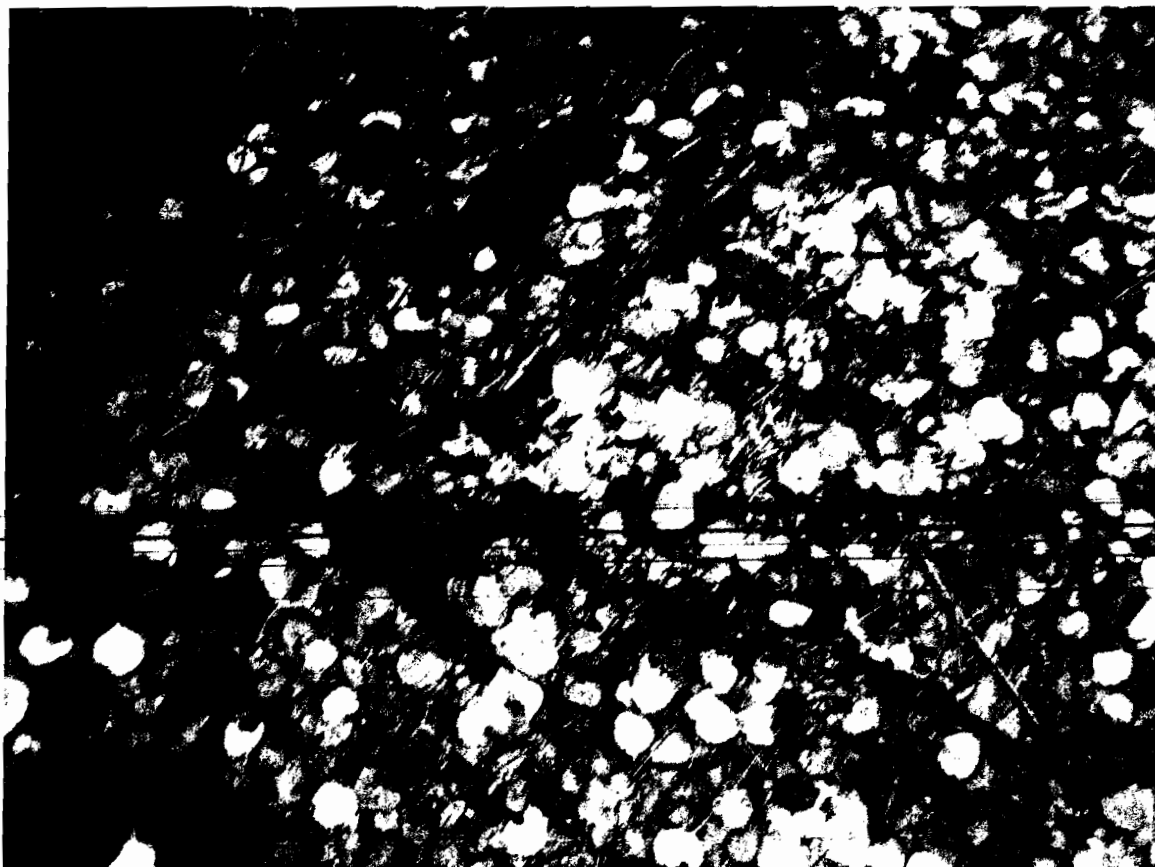


Photo 3—Remnants of the ties on the berms.

The four concrete pillars may be the base of a water tower. The pillars did not appear to be substantial enough to be bridge supports (Photo 4). The photo shows two of the pillars one exposed one partially exposed and the other two only had the tops exposed. The pillars were located near a road that may have been an abandoned rail line and the road and pillars were near a drop off of approximately 100 feet into an abandoned strip mine. While this evidence seems to indicate that the road may have been an abandoned rail line, no artifacts other than the concrete pillars were found to support the theory. However, the best interpretation for the existence of the four pillars is that they were the supports for a water tower for a water stop for steam powered locomotives servicing the mines.



Photo 4—One of the possible water tower concrete bases.

Conclusions and Recommendations

It would appear that the selected route for the proposed project has been heavily disturbed by either mining or logging activities. There were many opportunities to observe the surface on roads, tree tip-ups and in eroded areas. It is unlikely that any prehistoric cultural resources are intact and none were observed during the reconnaissance survey. Four historic resources were observed but it is the opinion of the investigator that while these resources will be impacted by the new project, they are not significant. All of the mines in the Mesabe Range used temporary rail lines to transport the ore and all of the mines used steam power well into the 1950s. Many more examples and many better examples exist as evidenced by the nearby Hill Annex Mine. It is therefore recommended that the project be allowed to proceed without any further archaeological investigations.